REMARKS/ARGUMENTS

I. Introduction:

Claims 1, 9, 10, 11, 16, and 17 are amended, claims 5, 6, 14, and 15 are canceled, and claims 22-23 are added herein. Claim 2 was previously canceled. With entry of this amendment, claims 1, 3-4, 7-13, and 16-23 will be pending.

II. Claim Rejections – 35 U.S.C. 103:

Claims 1-21 stand rejected under 35 USC 103(a) as allegedly being unpatentable over U.S. Patent No. 5,710,885 (Bondi) in view of U.S. Patent No. 6,014,707 (Miller et al.). Applicant respectfully traverses the rejection.

Bondi is directed to a network management system with improved node discovery and monitoring. Nodes to be polled are stored in a queue and poll requests are sent at a rate determined by the rate controlling mechanism. As shown in Fig. 3, the system uses a queue 10 which stores the identity of the nodes which are awaiting transmission of a poll, and is preferably a FIFO or FCFS queue. A rate control mechanism 12 controls the rate at which the pings are sent on the network to the nodes. The system allows an arbitrary number of nodes to be polled concurrently without receiving an acknowledgement. The rate control mechanism is used to prevent the network from being flooded with pings. The system schedules the pings for transmission in rapid succession at a controlled rate.

Bondi does not show or suggest advancing to a next set of a list of sets, wherein at least a portion of the sets include two or more node identifiers. In contrast to applicant's invention, Bondi arranges a plurality of node identities in a single queue in an order of transmission of polling messages to the nodes and schedules the pings for transmission in rapid succession from the queue. Thus, Bondi moves directly from one node identifier to the next node identifier in the same queue.

Furthermore, as noted by the Examiner, Bondi does not disclose a circular list of sets. The Examiner cites Miller et al. as disclosing a circular list of sets. The Miller et al. patent is directed to stateless data transfer protocol with client controlled transfer unit size. In order to initiate a data transfer, a client sends a request to a server containing the desired file name, the bytes of the files that are to be transferred, and the maximum PDU size and rate that are to be used in the transmission. When the file is prepared for transmission, a record containing the particulars of the requested download is created and placed into a PDU scheduling queue. The PDU scheduling queue may be constructed as a circular queue of scheduling timeslots. At periodic intervals, each timeslot in the PDU scheduling queue is checked in sequence for any download records to be serviced.

Neither Bondi nor Miller et al. show or suggest adding a copy of an identifier to a subsequent set of a circular list of sets that will be processed when a response from the node identified by the identifier is expected, as set forth in amended claim 1.

When Bondi polls a node identified in the queue, the IP address associated when the node is stored in a table and a ping count record in a timeout record of the table is incremented by one. The node is then deleted from the status poll transmission queue. If the scheduled timeout for a ping occurs and the ping count is not at the maximum number, the IP address for the node is then stored in the queue, after the response was expected and not received. Bondi does not show or suggest adding a copy of the identifier while processing the node or inserting the node identifier at a time a response is expected.

The other pending claims include similar features and are submitted as patentable for at least the reasons set forth above with respect to claim 1.

III. Conclusion

For the foregoing reasons, Applicant believes that all of the pending claims are in condition for allowance and should be passed to issue. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at (408) 399-5608.

Respectfully submitted,

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